Amendments to the specification:

Please delete the paragraph beginning at page 5, line 5 and replace it with:

Figure 1 shows an illustration of the construction of the expression vector of AHNP fusion protein (ASA) and the expression vector of streptavidin (SA).

Please delete the paragraph beginning at page 5, line 7 and replace it with:

Figure 2, panels A and B show data from expression and purification of fusion protein ASA and streptavidin. (Panel A) Induction of ASA expression by IPTG. Arrow shows the position of expressed ASA. Lane 1, total protein of uninduced cells (U); Lane 2, total protein of induced cells (I); Lane 3, soluble fraction of induced cells (S); Lane 4, insoluble fraction of induced cells (IS). (Panel B) Purified ASA and streptavidin by CO2+ column. Lanes 1 and 3, purified proteins were heated for 5 min in boiling water in the presence of ~~SDS~~ Sodium Dodecyl Sulfate (SDS), ~~DTT~~ Dithiothreitol (DTT) and ~~2-ME~~ 2-Mercaptoethanol (2-ME); Lanes 2 and 4, samples were heated for 5 min at 55 °C in the presence of SDS and DTT without 2-ME. Lanes 1 and 2, Streptavidin: Lanes 3 and 4, ASA.

Please delete the paragraph beginning at page 5, line 16 and replace it with:

Figure 3, panels A, B and C are data showing disulfide bond formation in the ASA fusion protein and streptavidin. AMS-alkylation was used to study if disulfide bonds were formed in ASA produced in the cytoplasm of E.coli BL21 LysE (Panel A) and after refolding (Panel B). Same method was also used to study refolded streptavidin. The alkylated and non-alkylated form were separated by their different mobility in non-reducing ~~SDS-PAGE~~ Sodium Dodecyl Sulfate-Polyacrylamide Gel Electrophoresis (SDS-PAGE) and visualized by Western blot probed with anti-streptavidin antibody.

Please delete the paragraph beginning at page 5, line 22 and replace it with:

Figure 4, panels A and B show data from ~~ELISA~~ enzyme-linked immunosorbent assay (ELISA) analysis of recombinant proteins for biotin and Her2-Fc binding ability. Panel A: Streptavidin or ASA was immobilized on biotin-coated plate. Bound protein was detected using an anti-streptavidin antibody-HRP. Panel B: After immobilization of Streptavidin or ASA on biotin-coated plate, Her2-human Fc fusion was added to each plate and bound fusion protein was detected using anti-Her2 antibody and anti-mouse IgG-HRP. The amounts of Streptavidin or ASA fusion protein used in this experiment were: well 1: 0; 2:0.11 ng; 3: 1.1 ng; 4: 11ng; 5: 110 ng; 6: 1100 ng.

Please delete the paragraph beginning at page 8, line 10 and replace it with:

Another means for constraining peptides involves introduction of covalent cross-links. Constraining the peptide backbone by introduction of covalent cross-links provides more dramatic effects than incorporating unusual amino acids. Macrocyclization is often accomplished by forming an amide bond between the peptide N- and C-termini, between a side chain and the N or C terminus, or between two side chains. A head-to-tail cyclization of side protected peptides synthesized by Fmoc/t-butyl solid phase procedures on polysterine resin derivatized with 4-hydroxymethyl-3-methoxyphenoacetic acid, the first generation dialkoxy-benzyl linkage agent, has been described by Sheppard, R.C. (Int. J. Peptide Res. 1982 20:451-454). In addition, the analogous linkage agent, 4-(4-hydroxymethyl-3-methoxyphenoxy)-butyric acid (HAMA), was recently employed in fragment condensation and solid phase synthesis of peptides with these highly acid sensitive linkers (In Peptides, E. Giralt and D. Andreu eds, ESCOM, Leiden, The Netherlands 1991, 131-133). The enkephalin analogs described by Schiller provide an example of side-chain to backbone covalent cyclization in which covalent attachment of the e-amino group of the D-lys residue to the C terminal backbone carboxylate group of Leu produces a cyclic 16-membered ring analog with high potency and significant μ receptor selectivity (Schiller et al. Int. J. Pep. Prot. Res. 1985; 25:171-177). ~~BOP-reagent~~ Benzotriazole-1-yl-oxy-tris-(dimethylamino)-phosphonium hexafluorophosphate (BOP-reagent) and carboimide/1-hydroxy-benzotriazole combinations have also been reported to be useful in the formation of cyclic peptides (Felix, A.M. Int. J. Pep. Prot. Res. 1988 31:231-238). Degrado et al. have also developed a

biologically active cyclized peptide analog of the GP IIb/IIIa complex using m-aminomethylbenzoic acid as the linker (U.S. Patent 6,022,523).

Please delete the paragraph beginning at page 12, line 7 and replace it with:

BIPs can be used in detection and quantification assays such as immuno-PCR, ~~immuno-RCA~~ immuno-rolling circle amplification (immuno-RCA), immuno-aRNA as well as any other assay that employs antibodies. Similarly, BIPs can be used in drug screening assays to identify compounds that enhance or inhibit protein-protein interactions known to have biological significance. Two proteins can be contacted with each other in the absence or presence of a test compound. BIPs can be used to determine whether the protein-protein interaction is enhanced or disrupted.

Please delete the paragraph beginning at page 28, line 24 and replace it with:

~~SEQ ID NO:11~~ SEQ ID NO:6 LINKER SEQUENCE

GLY GLY GLY GLY SER ARG SER ASN SER SER SER